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APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO
09/918,528	08/01/2001	Harri Salo	014975-064	3486

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EXAMINER	
SEVER, ANDREW T	
ART UNIT	PAPER NUMBER
2851	

DATE MAILED: 05/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.	Applicant(s)
09/918,528	SALO, HARRI
Examiner	**Art Unit**
Andrew T Sever	2851

Office Action Summary

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *7-23* is/are allowed.

6)☒ Claim(s) *1,2,5 and 6* is/are rejected.

7)☒ Claim(s) *3 and 4* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Specification

1. The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

2. The use of the trademark Teflon has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner, which might adversely affect their validity as trademarks.

Teflon is a trademark of Dupont for a brand of fluoropolymer resins.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 2, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salo (US 6,067,151.)

Salo teaches in figure 2 a refractometer, which comprises an optical module (5), arranged floatingly inside a housing structure. The optical module comprises an optical window (2) that is to be positioned in a process fluid (see figures 3-4 which show the window positioned in a process fluid), a beam forming and directing means (1) for forming an illuminating beam for directing the illuminating beam into the process fluid through the optical window and for directing a reflected part of the illuminating beam reflected from the process fluid away from the process fluid. A image detection means (4) for detecting an image generated by the beam forming and directing means is provided as well as a housing structure part arranged to support the optical module inside the housing structure (8a, 8b) via sealing means (6) for sealing the optical module against the housing structure part. The sealing means (6) is arranged between the optical window (2) and the housing structure part (8a). The housing structure part is taught to contact the process fluid and to support the optical window via the sealing means (6) and is taught to be made of Teflon (column 3 lines 7-9) which is mechanically rigid as is claimed by applicant's claim 5. Salo further teaches that means are provided for directing a sealing force between the optical window

and the housing structure part at a greater surface as is claimed by applicant's claim 2.

Salo does not teach all of Teflon's well-known properties. Product Information for one of the versions of Teflon PTFE 8 manufactured by DU PONT, teaches that Teflon has the well-known property of being chemically inert to nearly all industrial chemicals and solvents, which one with ordinary skill in the art would recognize would include it being resistant to corrosion by aggressive fluids. Further US patent 6,506,949 to Gillis et al. teaches in column 9 lines 11-25 that Teflon coated steel and glass are used when handling acids such as nitric acid. US patent 6,500,699 to Birdsley et al. teaches in column 6 lines 1-8 that Teflon also has the well known property of being a highly thermal-conductive material as is claimed by applicant's claim 6 as well as being corrosion-resistant.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 2, 5, and 6 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim1 of U.S. Patent No. 6,067,151.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the '7151 claims a refractometer, which comprises an optical module arranged floatingly inside a housing structure. The optical module comprises an optical window that is to be positioned in a process fluid, a beam forming and directing means for forming an illuminating beam for directing the illuminating beam into the process fluid through the optical window and for directing a reflected part of the illuminating beam reflected from the process fluid away from the process fluid. An image detector for detecting an image generated by the beam forming and directing means is provided as well as a housing structure part arranged to support the optical module inside the housing structure via sealing means for sealing the optical module against the housing structure part. Means is provided for directing a sealing force between the optical window and the housing structure part at a greater surface as is claimed by the current application's claim 2. The sealing means is arranged between the optical window and the housing structure part. The housing structure part is taught to contact the process fluid and to support the optical window via the sealing means, however it is not claimed what it is made of or that is specifically corrosion resistant.

The '7,151 patent does teach in the specification, however, that the sealing means is made of Teflon (column 3 lines 7-9) which is mechanically rigid as is claimed by the current application's claim 5. Product Information for one of the versions of Teflon PTFE 8 manufactured by DU PONT, teaches that Teflon has the well-known property of being chemically inert to nearly all industrial chemicals and solvents, which one with ordinary skill in the art would recognize would include it being resistant to corrosion by aggressive fluids. Further US patent 6,506,949 to Gillis et al. teaches in column 9 lines 11-25 that Teflon coated steel and glass are used when handling acids such as nitric acid. US patent 6,500,699 to Birdsley et al. teaches in column 6 lines 1-8 that Teflon also has the well known property of being a highly thermal-conductive material as is claimed by applicant's claim 6 as well as being corrosion-resistant.

Allowable Subject Matter

6. Claims 7-23 are allowed.

7. Claims 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: Dependent claims 3 and 4, as well as independent claims 7 and 19 claim that the material which supports the optical module against the housing structure part is made of either

sapphire or ceramic as oppose to the Teflon taught and claimed by the '7151 patent to Salo.

The prior art did not teach the use of either ceramic or sapphire in a refractometer for housing structure means with the exception of US patent 6,130,439 to Le Menn teaches in column 5 lines 14-21 to make the sensor of a refractometer out of such materials as sapphire or ceramic glasses. However this differs from the claimed invention, as Le Menn's sensor is separate from the light source and other components of the refractometer. Le Menn's sensor is only a cell for holding the sample. There is no motivation provided by either Le Menn or Salo to combine the two to produce the claimed invention. Therefore claims 7-23 are allowed and claims 3 and 4 would be allowed if written in independent for including the material of their dependent base claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T Sever whose telephone number is 703-305-4036. The examiner can normally be reached M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russell Adams can be reached at 703-308-2847. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

AS
April 28, 2003

RUSSELL ADAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800